UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,660	12/15/2000	Andrew Krutchinsky	600-1-277	2265

7590 09/25/2003

DAVID A. JACKSON, EAQ.
KLAUBER & JACKSON
411 HACKENSAC, AVENUE
HACKENSACK, NJ 07601

EXAMINER	
QUASH, ANTHONY G	
ART UNIT	PAPER NUMBER
2881	

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/737,660	KRUTCHINSKY ET AL.	
	Examiner	Art Unit	
	Anthony Quash	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/20/03, paper number 5* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,10-23,25-28,30-42,44-46 and 49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,10,20-23,25-28,39-41,44-46 and 49* is/are rejected.

7)☒ Claim(s) *11-19,23 and 30-38,42* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *20 June 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Applicants' amendment, paper number 5, has overcome the objections and the 112 rejections of the last office action paper number 4.

Claims 5-9,24,29,43,47-48 have been cancelled by applicants' amendment, paper number 5.

Claim Objections

Claims 11-19,23,30-38,42 are objected to as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 46 is rejected under 35 U.S.C. 102(b) as being anticipated by Biemann [243]. With respect to claim 46, Biemann [243] discloses a method for carrying out an inspection of a sample of a material comprising the steps of providing a compact disc, depositing at least one sample of a material to be analyzed onto the substrate, inspecting the sample with a laser to effect a physical change in at least one sample, probing the sample with inspection means to effect a physical change in the sample, and creating translational motion in at least one of an x direction and a y direction between the inspection means and at least one sample by moving one of the substrate or the inspection means. See Biemann [243] abstract, figs. 1-7,11-12, col. 1 lines 42-55, col. 2 lines 64-68, col. 3 lines 1-5, 33-68, col. 4 lines 5-20, col. 5 lines 1-45, col. 6 lines 15-69, col. 7 lines 1-5, 15-69, col. 8 lines 1-22, 35-68, col. 9 lins1-5, 15-21, 30-65, col. 10 lines 16-19, and col. 11 lines 4-10.

Claim 49 is rejected under 35 U.S.C. 102(b) as being anticipated by Biemann [243]. With respect to claim 49, Biemann [243] discloses an apparatus for examining and inspecting at least one sample in order to determine the characteristics of the sample, the apparatus comprising a support for rotatbly receiving a compact disc, the compact disc having deposited on a surface thereof at least one sample, an inspection means for effecting a physical change in at least one sample, the inspection means positioned for registration with the surface of the compact disc bearing at least one sample, and a traversal mechanism, adapted for rotational motion and translational motion in at least one of an x direction and a y direction, and capable of moving the sample in and out of the path of the inspection. See Biemann [243] abstract, figs. 1-

7,11-12, col. 1 lines 42-55, col. 2 lines 64-68, col. 3 lines 1-5, 33-68, col. 4 lines 5-20, col. 5 lines 1-45, col. 6 lines 15-69, col. 7 lines 1-5, 15-69, col. 8 lines 1-22, 35-68, col. 9 lins1-5, 15-21, 30-65, col. 10 lines 16-19, and col. 11 lines 4-10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,10,20-23,25-26,40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biemann [243]. As per claim 1, Biemann [243] teaches an apparatus for examining and inspecting at least one sample (16), in order to determine characteristics of the sample (16), the apparatus comprising a support (27,26) for receiving a compact disc (12) having deposited on a surface thereof at least one sample (16); inspection means (IR source, 72) for effecting a physical change in at least one sample (16) and a transversal mechanism (20) adapted for reciprocating movement, to move the sample in and out of the path of the inspection means (IR source, 72). See Biemann [243] abstract, col. 3 lines 33-69, col. 4 lines 5-20, col. 5 lines 1-45 and col. 8 lines 1-23. However, Biemann [243] does not specifically state the inspection means (IR source, 72) positioned for registration with the surface of the compact disc bearing at least one sample (16). Biemann [243] does teach the apparatus being rotated while recording spectra continuously. It also teaches that disc (12) can be rotated to a

particular sample (16) deposited on the disc at a specific position. See Biemann [243] col. 5 lines 25-32. In addition, Biemann [243] teaches that the interval between sample (16) positions by can be examined as a time record of separation intervals by the computer. Biemann [243] also teaches that identification markings can be added to the disc (12). See Beimann [243] col. 7 lines 35-42, and col. 8 lines 45-55. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the inspection means (IR source, 72) positioned for registration with the surface of the compact disc bearing at least one sample (16) in order to repeat analysis of specific samples as taught in Biemann [243]. Although Biemann [243] does not specifically teach inspection means being capable of moving translationally in at least one of an x direction and a y direction, it does teach the axis of the disc being translated in the xy plane by the drive unit. See Biemann [243] fig.4 and col. 5 lines 25-40. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the inspection means be capable of moving translationally in at least one of an x direction and a y direction, since the examiner takes official notice of the equivalent of translating the inspection means with translating the disc holder for their use in aligning the beam with the sample on the located on the disc.

As per claim 2, Biemann [243] teaches the transversal mechanism (20) being a driver having a rotatable drive mechanism that rotates the compact disc (12). See Biemann [243] figs. 1,4,7, col. 5 lines 25-45, and col. 11 lines 4-10.

As per claims 3-4, Biemann [243] teaches the transversal mechanism (20) effectuating positional change between the sample (16) and the compact disc (12) in the radial direction. See Biemann [243] figs. 1,4,7, col. 5 lines 25-45, and col. 11 lines 4-10.

As per claim 10, Biemann [243] teaches all aspects of the claim except for specifically stating that the mass spectrometer incorporating the apparatus further be comprised of an analyzer selected from the group consisting of quadrupole, time of flight (TOF), quadrupole TOF, quadrupole-quadrupole TOF (Qq TOF) triple quadrupole TOF, magnetic sector, and ion trap mass analyzers. Biemann [243] does teach that the apparatus is advantageously compatible with all forms of mass spectrometry, including quadrupole spectrometry. See Biemann [243] col. 7 lines 64-69 and col. 8 lines 1-10. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the mass spectrometer incorporating the apparatus further be comprised of an analyzer selected from the group consisting of quadrupole, time of flight (TOF), quadrupole TOF, quadrupole-quadrupole TOF (Qq TOF) triple quadrupole TOF, magnetic sector, and ion trap mass analyzers in order to aid in identifying the components of the sample.

As per claim 20, Biemann [243] teaches digital information associated with at least one sample (16) being positioned on the disc (12). See Biemann [243] col. 6 lines 45-52 and col. 8 lines 35-60.

As per claim 21, Biemann [243] teaches the inspection means being capable of examining and inspecting information stored on the surface of the compact disc (12). See Biemann [243] col. 8 lines 35-58.

As per claim 22, Biemann [243] teaches information being stored on the surface of the compact disc (12) on which the sample (16) is stored. See Biemann [243] col. 8 lines 35-58.

As per claim 25, Biemann [243] teaches the information stored on the disc being related to sample identity. See Biemann [243] col. 8 lines 42-60.

As per claim 26, Biemann [243] teaches the information stored on the disc related to movement of the disc. See Biemann [243] col. 8 lines 35-58.

As per claim 40, Biemann [243] teaches the inspection means being capable of examining and inspecting information stored on the surface of the compact disc (12). See Biemann [243] col. 8 lines 35-58.

Claims 27-28,32,39,41,44,45, are rejected under 35 U.S.C. 103(a) as being unpatentable over Biemann [243]. As per claim 27, Biemann [243] teaches an analytical device for determining the properties of at least one sample (16) of material, the analytical device comprising a base (27), a substrate (12) adapted to be rotatably received by the base (27), the substrate (12) having deposited thereon at least one sample (16) of the material to be analyzed, an inspection means (IR source, 72) for effecting a physical change in the at least one sample (16), the inspection means (IR source, 72) movably associated with the base (27), a translation system capable of movement in at least one of an x direction and a y direction and adapted to effect a

change in position between the inspection means (IR source,72) and the substrate (12). See Biemann [243] abstract, fig.4 col. 3 lines 33-69, col. 4 lines 5-20, col. 5 lines 1-45 and col. 8 lines 1-23. However, Biemann [243] does not specifically state the inspection means (IR source, 72) registering with the at least one sample (16) on the substrate (12), at a predetermined location on the substrate (12). Biemann [243] does teach the apparatus being rotated while recording spectra continuously. It also teaches that disc (12) can be rotated to a particular sample (16) deposited on the substrate (12) at a specific position. See Biemann [243] col. 5 lines 25-32. In addition, Biemann [243] teaches that the interval between sample (16) positions by can be examined as a time record of separation intervals by the computer. Biemann [243] also teaches that identification markings can be added to the substrate (12). See Beimann [243] col. 7 lines 35-42, and col. 8 lines 45-55. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the inspection means (IR source, 72) registered with the at least one sample (16) on the substrate (12), at a predetermined location on the substrate (12) in order to repeat analysis of specific samples and aid in the identification of specific samples as taught in Biemann [243].

As per claim 28, Biemann [243] teaches that the analytical device is to be selected from the group consisting of a mass spectrometers, UV spectrometers, fluorescence detectors, an infrared spectrometers, visible light spectrometers, RAMAN spectrometers, surface plasma resonators, and atomic force microscopes. See Biemann [243] col. 6 lines 30-45 and col. 7 lines 64-69.

As per claim 32, Biemann [243] teaches the positioning guide being movable in at least one of an X direction and a Y direction. See Biemann [243] fig. 4 and col. 5 lines 30-40.

As per claim 39, Biemann [243] teaches digital information associated with at least one sample (16) being positioned on the disc (12). See Biemann [243] col. 6 lines 45-52 and col. 8 lines 35-60.

As per claim 41, Biemann [243] teaches information being stored on the surface of the compact disc (12) on which the sample (16) is stored. See Biemann [243] col. 8 lines 35-58.

As per claim 44, Biemann [243] teaches the information stored on the disc being related to sample identity. See Biemann [243] col. 8 lines 42-60.

As per claim 45, Biemann [243] teaches the information stored on the disc related to movement of the disc. See Biemann [243] col. 8 lines 35-58.

Response to Arguments

Applicant's arguments filed 6/20/03 have been fully considered but they are not persuasive. With respect to the applicants' claim concerning the disc in Biemann [243] not being made of plastic but instead being made of metal, the examiner considers this argument moot due to the fact that it is not stated in any of the claims that the compact disc should be made of plastic. With respect to applicants' arguments concerning translation, the examiner would like to direct the applicants' attention to the rejected

claims above where the examiner has treated applicants' arguments concerning translation.

Allowable Subject Matter

Claims 13,14.15,32,33,34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: With respect to claims 13,and 32 the prior art of record does not teach nor disclose the positioning guide being movable in at least one of an x direction and a y direction, in combination with the other aspects of the claims 13 and 32.

With respect to claims 14, and 33 the prior art of record does not teach nor disclose the positioning guide being movable in x direction and a y direction, in combination with the other aspects of claims 14 and 33.

With respect to claims 15, and 34 the prior art of record does not teach nor disclose the positioning guide, ion guide rods and analytical device being movable in an x direction and a y direction, in combination with the other aspects of claims 15 and 34.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Quash whose telephone number is (703)-308-6555. The examiner can normally be reached on M-F from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee, can be reached on (703)-308-4116. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

A. Quash 9/8/03

JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800